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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/516,718	03/01/2000	Hajime Oda	F-6461	2689

7590 08/27/2002
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New York, NY 10168

EXAMINER

BHAT, ADITYA S

ART UNIT PAPER NUMBER

2863

DATE MAILED: 08/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/516,718

Applicant(s)

HAJIME ODA, CHIBA-KEN

Examiner

Aditya S Bhat

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nonaka (USPN 5,915,233).

Referring to claims 1, 5 and 14; the aforementioned claims all teach a sensor or sensor module with a power input and an output for supplying a sensor or sensor module output. (See Figure 1) Nonaka (USPN 5,915,233) does not directly state that the sensors have a power input. However, sensors 8 and 10 are connected to the CPU along with the other components of the device. Nonaka (USPN 5,915,233) does teach a power supply (Col. 6, line 32). It would be inherent for this or any electronic device to have a power inputs connected to the electrical components in the circuit in order for the circuit to function properly. The applicant also claims a power supply switch, this would also be inherent to the invention. It is not uncommon for an electronic device to have a power (on/off) switch. A control circuit, which receives and processes the sensor output (col. 5, lines 50 –57) and then turns off the power switch in order to conserve energy (Col. 6, lines 31-32) i.e. standby state.

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Claim 2 refers to a distance measuring sensor with light projection and receiving means. (See abstract)

Claim 3 refers to a sensor (26;Col.5 Line 50), which includes an open collector type output, where the controller includes resistors in series and a switch (38;Col.9, Lines 64). Although, Nonaka (USPN 5,915,233) does not teach the exact same circuit configuration as the applicant, it would be obvious to one skilled in the art to modify Nonaka (USPN 5,915,233) with a different circuit configuration in order to optimize the performance of the distance measurement system.

Claim 4 refers to a standby state in order to conserve energy (Col.6, lines 31-32)

Claim 6 refers to a sensor (26;Col.5 Line 50), a sensing circuit and a control circuit (22;Col.5 Line 39), with a switch to enable reading (Col.8, Lines 25-30).

Claim 7 refers to a switch to disable readings. Nonaka (USPN 5,915,233) does not directly teach a switch to disable readings. However it does teach enabling a reading using a switch. Therefore it would be obvious to one skilled in the art

Claims 8,11,13,15, 17 and 20 refer to a sensor module with an emitting element (Col.3, Line 4-10), and a sensing circuit where the sensor (26;Col.5 Line 50), is a light detection device (2 & 4;Col.4, Lines 60-65) (Col.3, lines 6-10).

Claims 9 & 18 refer to a drive signal and an output-indicating signal, which are formed by numerous pulses. Although, Nonaka (USPN 5,915,233) does not directly teach a drive signal formed by numerous pulses. It is inherent for an electronic device to have a drive signal in order for the circuit to operate. Nonaka (USPN 5,915,233) does teach a driver circuit (32;Col.8 Line 16).

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Claims 10, 12 & 19 refer to an emitting element (Col.3, Line 4-10), which is a light generating device and a sensor (26; Col.5 Line 50) element that is a light detection device (2 & 4; Col.4, Lines 60-65) (Col.3, lines 6-10).

Response to Amendment

Applicant's arguments filed 02 May 2002 have been fully considered but they are not persuasive.

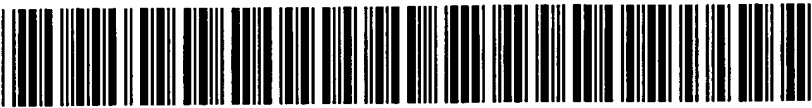
Applicant states that the prior art fails to disclose a control circuit to that turns off the power supply after a reading has been taken by the distance sensor.

As pointed out in this office action Nonaka (USPN 5,915,233) utilizes energy conservation tactics (Col. 6, lines 31-32). Nonaka (USPN 5,915,233) also teaches a CPU which usually have standby modes or employ other energy conservation tactics in order to prolong the life of the CPU.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of



Creation date: 02-24-2004
Indexing Officer: TANDERSON2 - TRUDIE ANDERSON
Team: OIPEBackFileIndexing
Dossier: 09516718

Legal Date: 10-27-2002

No.	Doccode	Number of pages
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Remarks:

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